



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,606	02/14/2006	Ulrich Rohs	ROHS ET AL -19 PCT	1697
25889 7590 09/22/2008 COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576				
EXAMINER WRIGHT, DIRK				
ART UNIT 3681		PAPER NUMBER		
MAIL DATE 09/22/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,606

Applicant(s)

ROHS ET AL.

Examiner

Dirk Wright

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48,49,60-63,65,66,68-72,75-84 and 95-133 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 102-119 is/are allowed.
- 6) ☒ Claim(s) 48,49,60-63,65,66,68-72,75-83,95,97,98,120,121,125,126,128-130,132 and 133 is/are rejected.
- 7) ☒ Claim(s) 84,96,99,122,123 and 127 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Response to Amendment

This is a Supplemental Action in order to correct the rejected claim numbering.

The objection to the drawings under 35 CFR 1.83(a) has been overcome by applicants amendment filed June 21, 2008. The objection is therefore withdrawn.

The provisional rejection of claims 48-129 on the grounds of non-statutory obviousness-type double patenting over claims 69-204 of copending application 10/529,605 has been overcome by applicant's terminal disclaimer filed with the amendment filed June 21, 2008. The rejection of the claims is therefore withdrawn.

The rejection of claims 50-101,105, 111, 112, 117, 118, 120, 121,127 and 128 under 35 U.S.C. 112, second paragraph has been overcome by applicant's amendment filed June 21, 2008. The rejection is hereby withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 83 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "third transmission path" lacks an antecedent.

Claims 95 and 98 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what applicant means in the claim by the term "main differential", since no further description is provided.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 48 and 49 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohs '131. It is in the nature of friction drives to transmit power through a thin film of liquid. Ideally, no metal to metal contact occurs. Therefore, all friction drives have a space between their elements for the disposition of traction liquid. The space can be either designed in, or due to manufacturing errors. Rohs discusses traction fluid in the Summary of the Invention, therefore there must be a gap between the ring and the cones of Rohs because the use of a traction fluid would otherwise serve no purpose. Rohs shows cone friction transmission 19, including two cones 3 and 4, and an interposed ring 32, driven by a torque converter 17, with an associated output gearing 50. Rohs shows another arrangement in figure 3 where the gearing 18 is disposed before the cone friction transmission.

Claims 75-80 and 82 are rejected under 35 U.S.C. 102(e) as being anticipated by DeVincent '667. DeVincent shows a partial CVT 18 with revolving elements 20 and 22

with a connecting element 26 in a first path through the transmission, and a geared transmission/power divider 12 and 14 provided in a second path through the transmission, and a second power divider/combiner differential 32 is provided wherein a selectable clutch/switching gear 52 provides a plurality of operating ranges.

Claims 120, 121, 124-126, 128 and 129 are rejected under 35 U.S.C. 102(b) as being anticipated by Winter et al. '581. Winter shows two partial transmissions 40 and 60 with a power divider/planetary differential 30 driven by an input shaft 1. A clutch 9 selectively disengages the second partial transmission 60 from the output shaft 2. Both partial transmissions are connected to the same output shaft. A brake 8 is provided for one side of the input differential 30.

Claims 97, 98, 100, 132 and 133 are rejected under 35 U.S.C. 102(b) as being anticipated by Wedeniwski '820. Wedeniwski shows two partial transmissions 49a and 49b, a planetary input divider 25, coaxial input 11 and output 13 shafts, a main differential 21 with a disconnecting clutch 69 on the output side, and wherein the two partial transmissions are brought together by a gear 46 on the output side of the transmission.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 60-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohs '131 in view of Flichy '107. Rohs does not show a texture on his cone friction transmission. Flichy shows grooves R1 on a disc type of friction drive. It would have been obvious to one of ordinary skill in this art to use grooves similar to that used on the Flichy device because it would have been obvious to try such a feature to improve the performance thereof.

Claims 65, 66, and 68-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rohs '131 in view of Flichy '107, and further in view of Schmidt '661. Rohs does not show a CVT with plural power paths. Schmidt shows one with a belt type CVT 16, plus numerous clutches and differential 10. It would have been obvious to try the CVT of Rohs in the transmission of Schmidt because no modification to Rohs or Schmidt would be required to achieve the combination and because no unexpected results would be obtained by the substitution.

Claim 81 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeVincent '667. DeVincent doesn't discuss synchronous shifting between ranges but it would have been obvious to one of ordinary skill in this art to shift this transmission that way because it is a known technique used to improve similar devices in an identical way. Synchronous shifting between ranges for compound CVT's is an old and well known technique in this art.

Claim 101 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wedeniwski '820. It would have been obvious to one of ordinary skill in this art to provide a clutch or other disengagement device between the input shaft of Wedeniwski

and a drive source because it would be a known technique to improve this device in an identical way and because no unexpected results would be obtained by adding a clutch between a drive source and the transmission.

Claim 130 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt '661. Schmidt shows a partial transmission 70 with two revolving elements 40 and 64 with a coupling element 68, a first switching part 66, a second switching part 34 for engaging a third power path in the transmission. It would have been obvious to one of ordinary skill in this art to provide grooves on the two engaging surfaces of the coupling element 68 because this is a known technique used to improve similar devices in an identical way. Belts for CVT's commonly have grooves in them which mesh with corresponding grooves in the faces of the pulleys.

Allowable Subject Matter

Claims 102-119, and 131 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art does not anticipate nor render obvious the claimed invention of:

A transmission with at least two transmission elements revolving on different axes, said two transmission elements transmitting a torque frictionally via a coupling element, whereby said two transmission elements and said coupling element being braced against one another via a pressure device, wherein a clutch element is provided, through which the two transmission elements are alternately disconnected from a third transmission element by opening a clutch element or connected to the third transmission element by closing the clutch element and which is closed by the pressure applied by the pressure device, or:

A revolving transmission having at least two revolving transmission elements, which may transmit a torque frictionally via a coupling element, and a continuously variable partial transmission, said coupling element being positionable at different running paths of at least one of said revolving transmission elements, wherein the coupling element has at least one running surface having grooves, wherein first and second transmission paths are connected in parallel and engaged alternately via a switching gear part, the continuously variable partial transmission being provided in said first transmission path, and wherein the switching gear part couples the continuously variable partial transmission to a pump wheel of a converter and a second transmission stage is coupled to a turbine wheel of the converter.

No particular single feature of the claim renders the claim as a whole patentable.

Only the claim taken as a whole combination is deemed new and unobvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 84, 96, 99, 122, 123, and 127 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art Discussed

The references cited by the examiner are deemed pertinent to applicant's disclosure.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dirk Wright whose telephone number is 571-272-7098. The examiner can normally be reached on Monday through Friday, 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dirk Wright/
Primary Examiner
Art Unit 3681

DW
Tuesday, September 16, 2008